

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2004/003018

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L29/423 H01L29/417 H01L29/732

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, COMPENDEX, INSPEC, PAJ, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SEI-HYUNG RYU ET AL: "1.8 kV, 3.8 A bipolar junction transistors in 4H-SiC" PROCEEDINGS OF THE 13TH. INTERNATIONAL SYMPOSIUM ON POWER SEMICONDUCTOR DEVICES & ICS. ISPSD'01. OSAKA, JAPAN, JUNE 4 - 7, 2001, INTERNATIONAL SYMPOSIUM ON POWER SEMICONDUCTOR DEVICES & IC'S, NEW YORK, NY : IEEE, US, 4 June 2001 (2001-06-04), pages 37-40, XP010551565 ISBN: 4-88686-056-7C	1,6
Y	abstract; figure 1	2-5
X	EP 0 341 221 A (SGS THOMSON MICROELECTRONICS) 8 November 1989 (1989-11-08)	6
Y	column 3, line 27 - column 5, line 50; figures 1-4	2-5
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

25 August 2004

Date of mailing of the international search report

02/09/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Berthold, K

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 835 588 A (NAWATA YOSHIKI ET AL) 30 May 1989 (1989-05-30) column 9, lines 5-20 -----	2
A	GB 2 081 009 A (WESTINGHOUSE ELECTRIC CORP) 10 February 1982 (1982-02-10) page 4, line 45 - line 52; figure 4 -----	3
A	US 4 236 171 A (SHEN PETER) 25 November 1980 (1980-11-25) abstract; figures 1-4; table a -----	1-6
A	PATENT ABSTRACTS OF JAPAN vol. 0121, no. 15 (E-599), 12 April 1988 (1988-04-12) & JP 62 244170 A (SANYO ELECTRIC CO LTD; others: 01), 24 October 1987 (1987-10-24) abstract -----	1
A	US 3 678 348 A (REBER ROBERT L ET AL) 18 July 1972 (1972-07-18) column 3, line 33 - line 37; figures 2,3 -----	3
A	US 5 229 313 A (TAKATA IKUNORI) 20 July 1993 (1993-07-20) column 2, line 33 - line 40 -----	1-6

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Information on patent family members

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